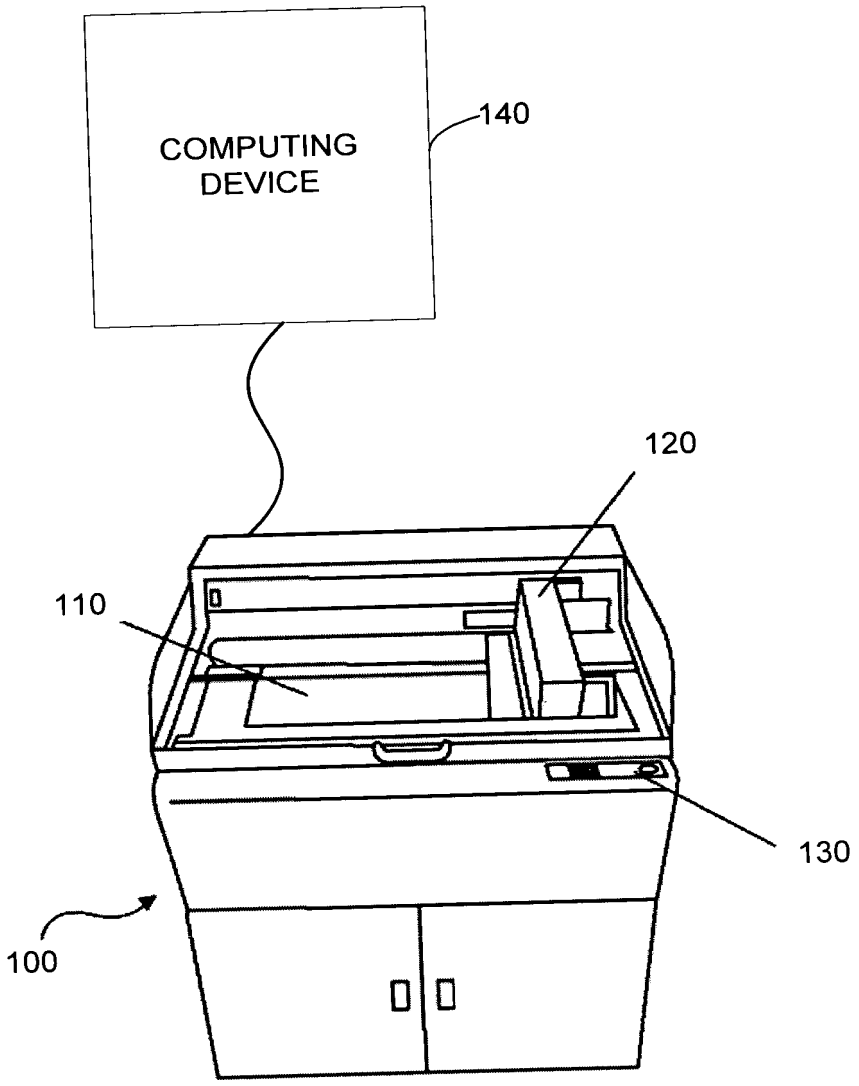


FIG. 1

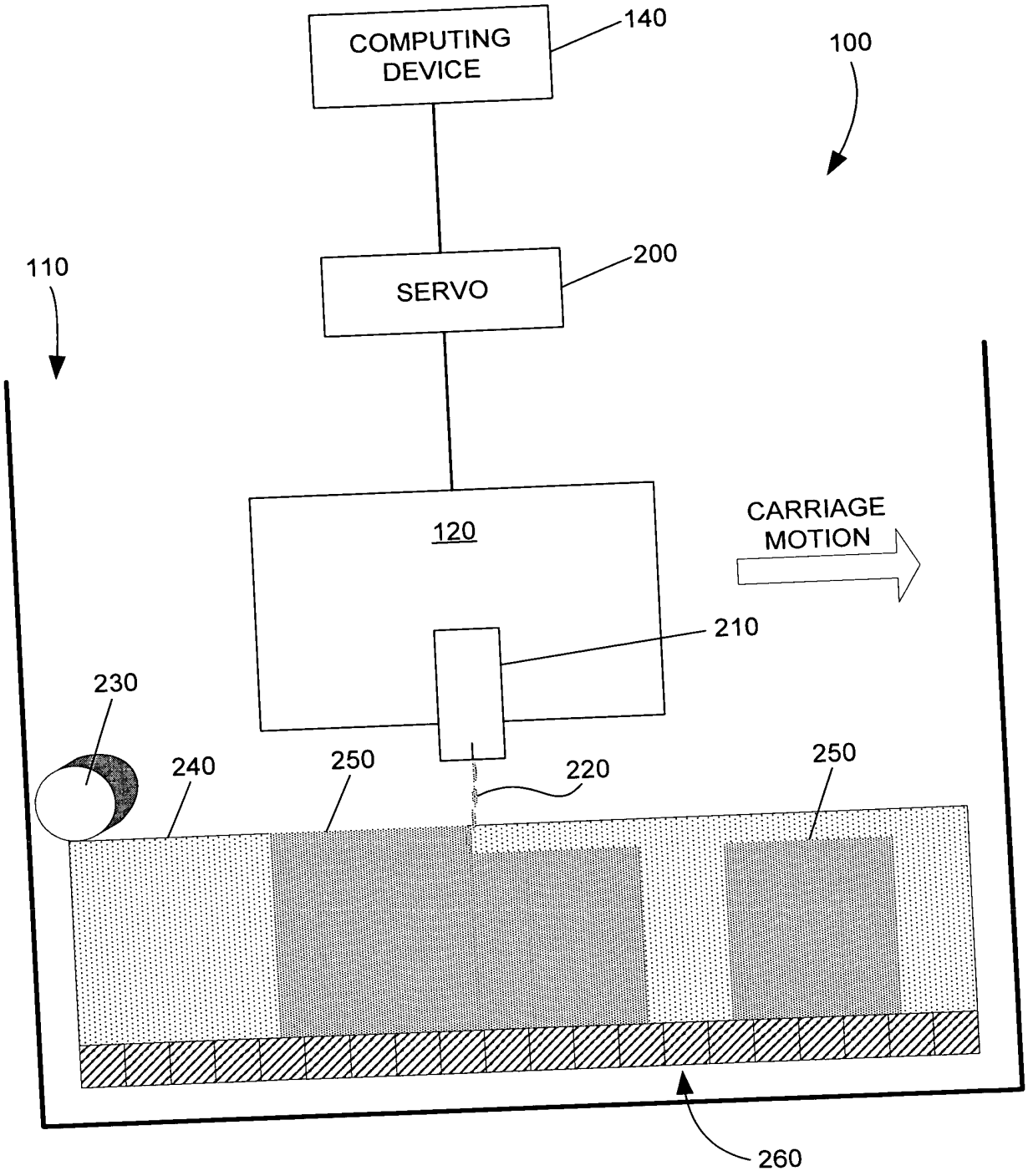

COMPUTING DEVICE
140
100
110
SERVO
200
120
CARRIAGE MOTION
210
230
240
250
220
250
260

FIG. 2

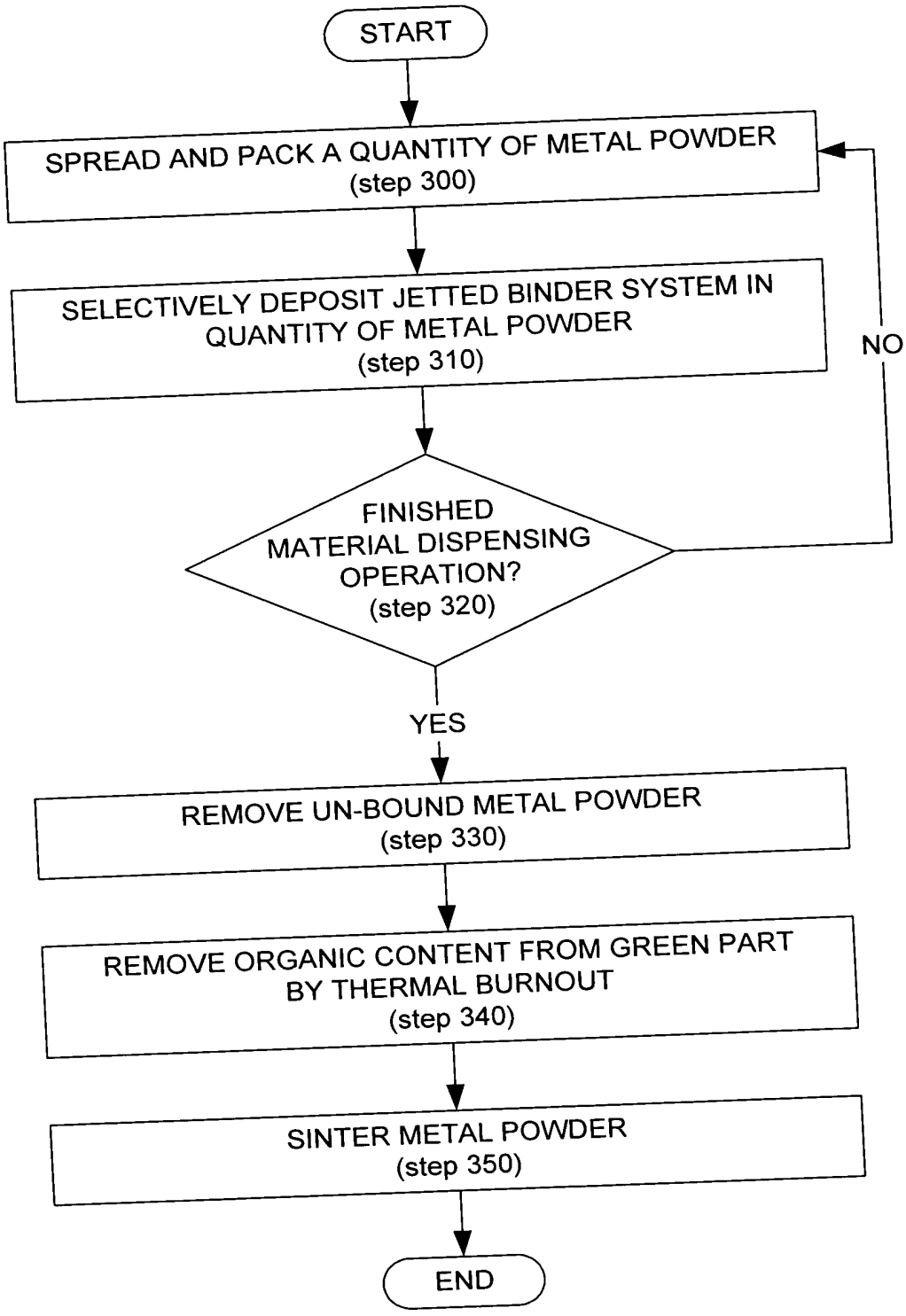

START
SPREAD AND PACK A QUANTITY OF METAL POWDER
(step 300)
SELECTIVELY DEPOSIT JETTED BINDER SYSTEM IN QUANTITY OF METAL POWDER
(step 310)
FINISHED MATERIAL DISPENSING OPERATION?
(step 320)
NO
YES
REMOVE UN-BOUND METAL POWDER
(step 330)
REMOVE ORGANIC CONTENT FROM GREEN PART BY THERMAL BURNOUT
(step 340)
SINTER METAL POWDER
(step 350)
END

FIG. 3

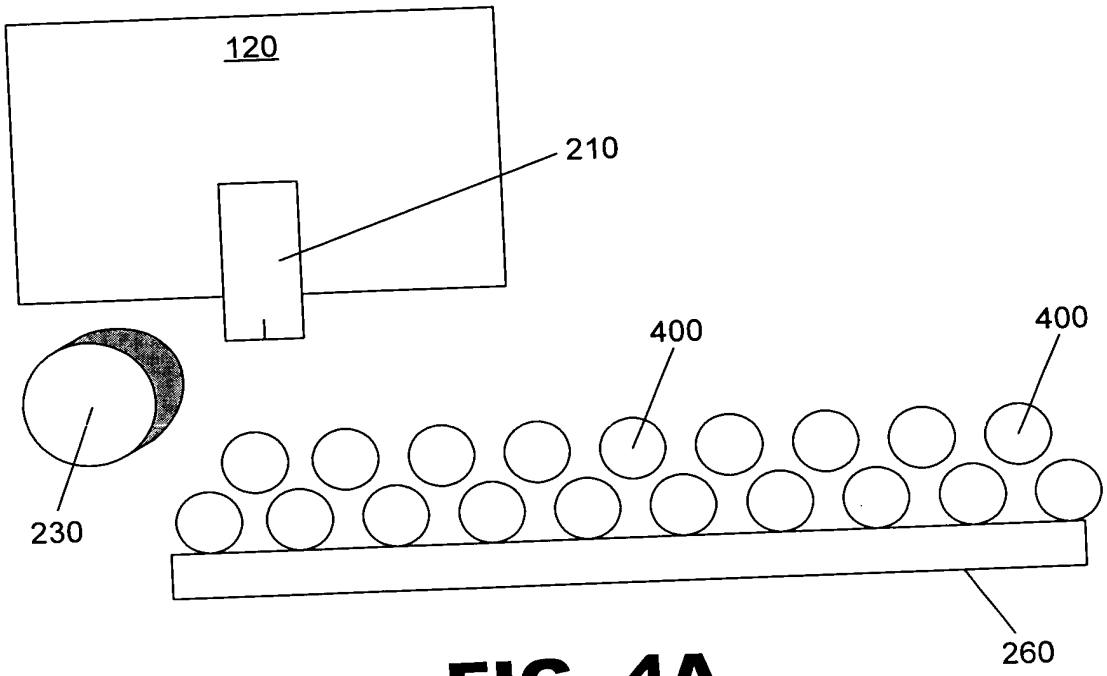


FIG. 4A

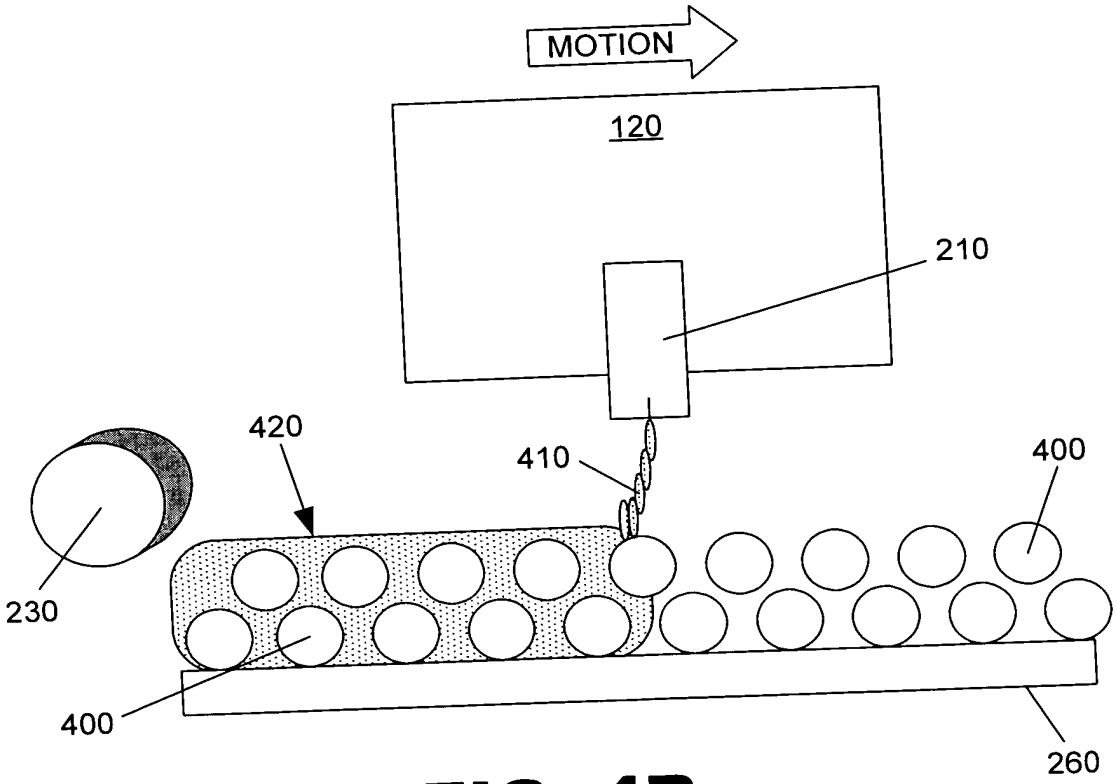


FIG. 4B

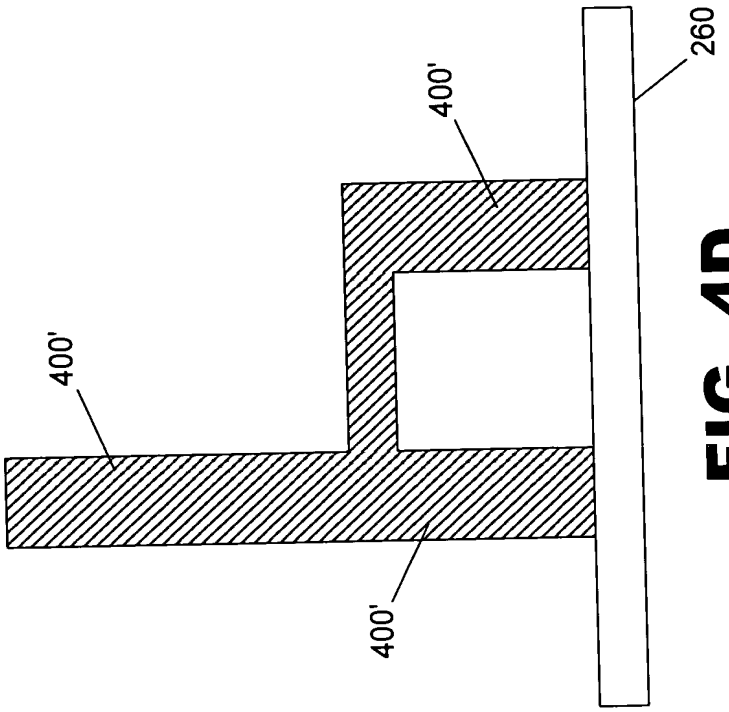


FIG. 4D

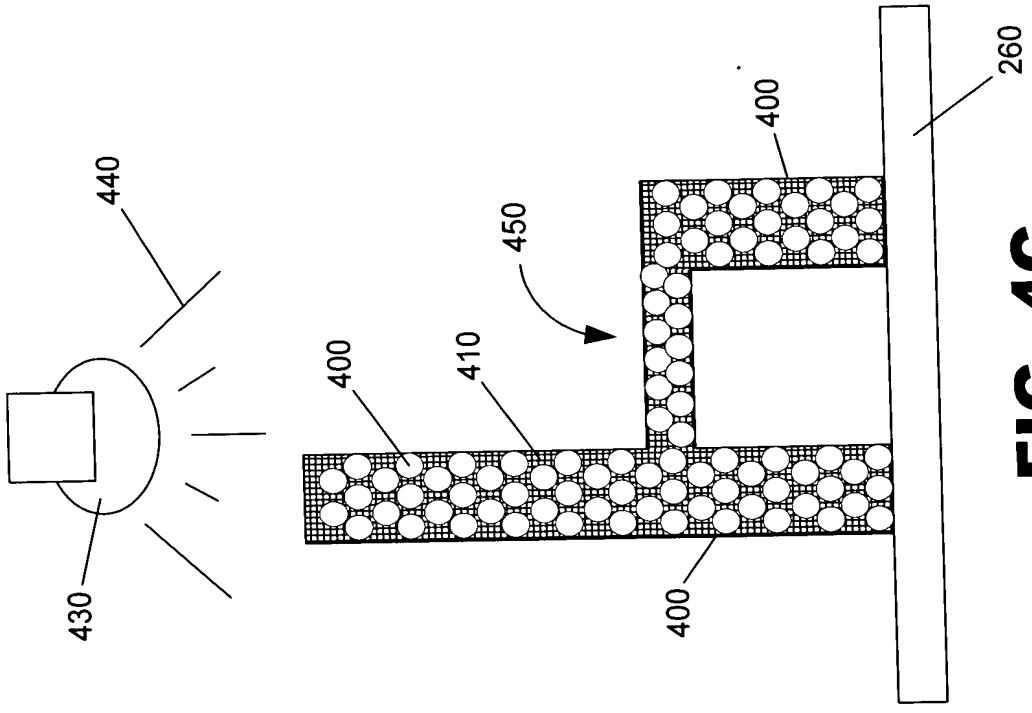
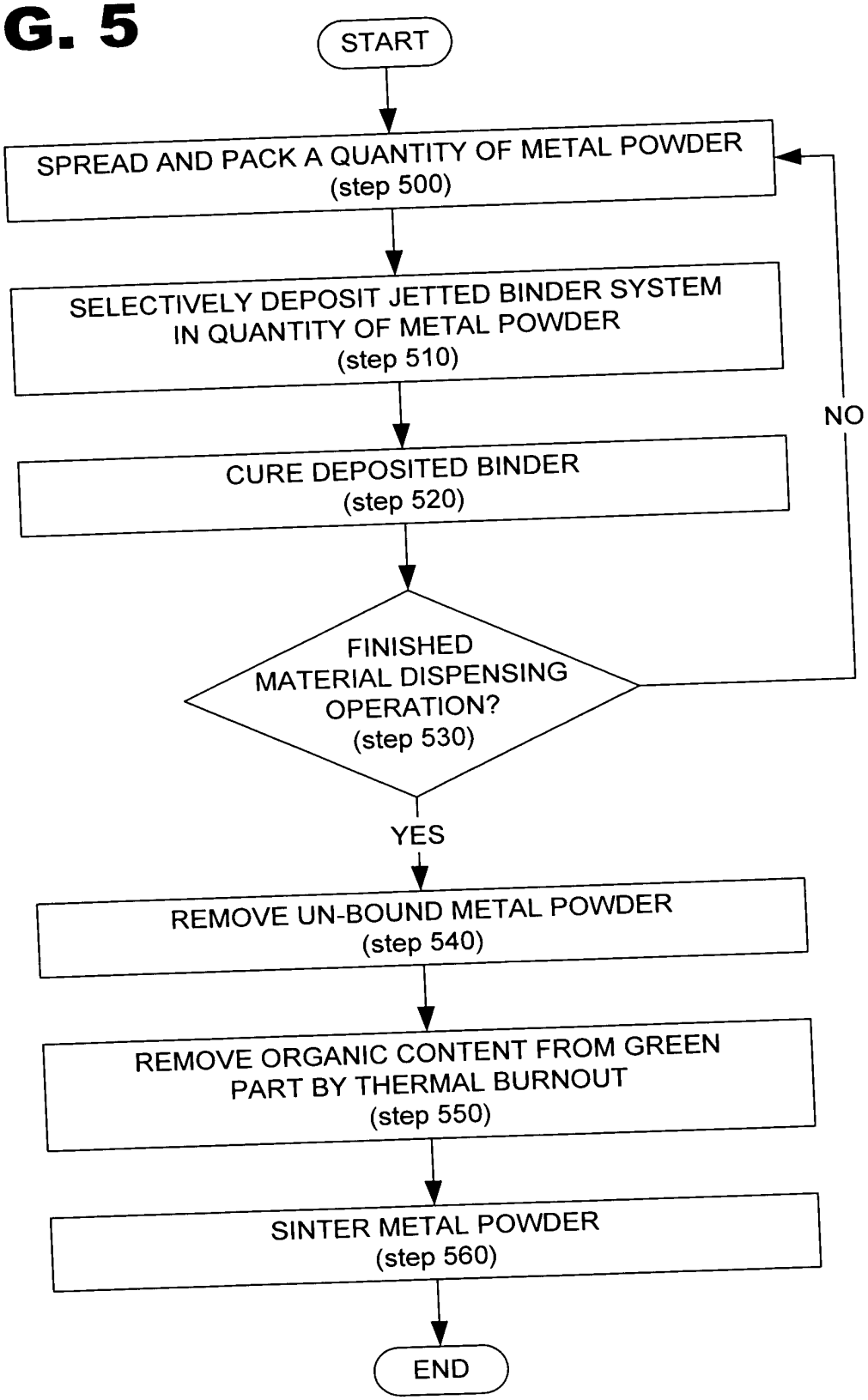


FIG. 4C

FIG. 5


START
SPREAD AND PACK A QUANTITY OF METAL POWDER
(step 500)
SELECTIVELY DEPOSIT JETTED BINDER SYSTEM
IN QUANTITY OF METAL POWDER
(step 510)
CURE DEPOSITED BINDER
(step 520)
FINISHED
MATERIAL DISPENSING
OPERATION?
(step 530)
NO
YES
REMOVE UN-BOUND METAL POWDER
(step 540)
REMOVE ORGANIC CONTENT FROM GREEN
PART BY THERMAL BURNOUT
(step 550)
SINTER METAL POWDER
(step 560)
END

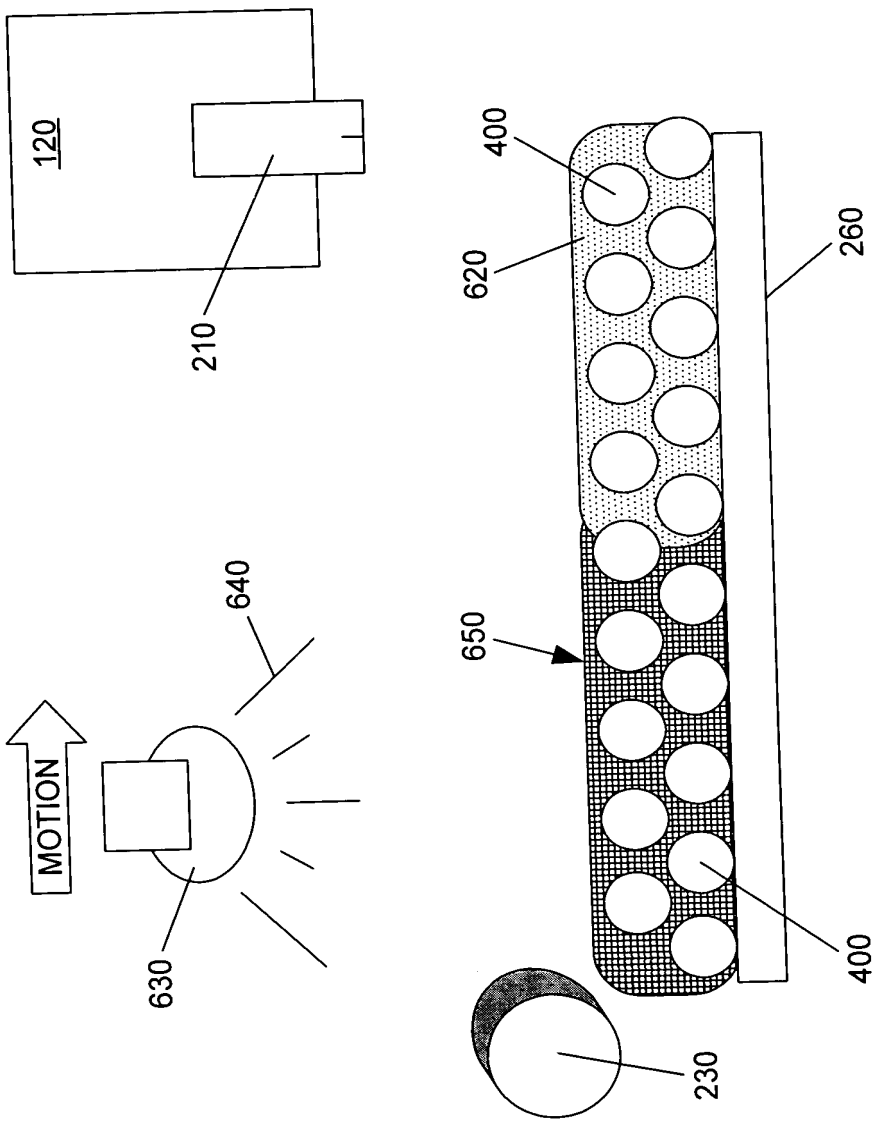


FIG. 6